

**To:** KBrasaemle@TechLawInc.com[KBrasaemle@TechLawInc.com]  
**From:** LEE, LILY  
**Sent:** Tue 4/26/2016 8:28:27 PM  
**Subject:** FYI Yes, still interested in Thorium  
[image003.png](#)  
[ATT00001.htm](#)  
[image004.png](#)  
[ATT00002.htm](#)  
[EMAC 8823-0003-0100.R3Fn SUPR Abstract Rev 3.pdf](#)  
[ATT00003.htm](#)  
[Dan Hirsch - reply to email 4-18-2016.docx](#)  
[ATT00004.htm](#)

I asked rob to look, still not heard back

Lily Lee  
USEPA Region 9  
Superfund Division  
415-947-4187

Begin forwarded message:

**From:** "LEE, LILY" <[LEE.LILY@EPA.GOV](mailto:LEE.LILY@EPA.GOV)>  
**Date:** April 22, 2016 at 10:38:58 AM PDT  
**To:** "Terry, Robert" <[Terry.Robert@epa.gov](mailto:Terry.Robert@epa.gov)>, Robert W Terry <[rwterry@msn.com](mailto:rwterry@msn.com)>  
**Cc:** "Chesnutt, John" <[Chesnutt.John@epa.gov](mailto:Chesnutt.John@epa.gov)>  
**Subject:** Thank you! Yes, still interested in Thorium

Yes, your work yesterday and Wed were incredibly valuable. Thank you!

Yes, I'd be interested in what you think of the fine print re Thorium, esp at Survey Unit 124, which I sent you yesterday. If you have time, Survey Unit 119 is 2<sup>nd</sup> priority. Now that the meeting is over, it is no longer as urgent.

It would also be great if you could help figure out what background for Thorium-232 the Navy is using. Attached Word Doc I have cut & pasted language from the various RACRs re background. I thought Mark told me that Hunters Pt only had background agreed to for Ra-226 and not for anything else. The language in some of the RACRs is consistent with that. But then Zach from RASO said he didn't remember the background number for Thorium-232, so he must have thought that there was one.

Mark said to look at the tables in the Abstract. So in the attached Abstract, I saw this on p.25 of

the pdf:

### **“3.3 REFERENCE AREA**

Reference area samples for the sanitary sewer and storm drain removal project were obtained in April 2006 in an area of the Building 813 parking lot in Parcel D-2. Building 813 was identified in the HRA as being impacted, but the parking lot area was not identified as being impacted, and is considered of like material to that encountered in the soils in survey units. Eighteen samples were collected systematically from this area for reference area purposes. All 18 samples were analyzed at the on-site laboratory by gamma spectroscopy. Ten percent of samples (two samples total) were also analyzed for  $^{90}\text{Sr}$  at the on-site laboratory. The reference area samples provided a basis for net activity concentration. Background activity for  $^{226}\text{Ra}$  was determined to be 0.485 pCi/g, placing the release criterion at 1.485 pCi/g of  $^{226}\text{Ra}$ .

The reference area gamma spectroscopy and  $^{90}\text{Sr}$  results are provided in Attachment 2.

A summary of the results is provided in Table 3-3.”

But it doesn't show Thorium-232. Could you look at Attachment 2? It does not show Th-232, but it does show Ac-282. What do you think?